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September 7, 2004



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Mr. Steve Zappe, WIPP Project Leader
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New Mexico Environment Department
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Subject: Permittees' Comments on the Class 2 Permit Modification to the
Hazardous Waste Facility Permit, No. NM4890139088-TSDF,
Procedure for Consideration of Tank Waste

Dear Mr. Zappe:

Enclosed please find the Permittees' comments on the Class 2 permit modification request, "Procedure for Consideration of Tank Waste," for the Hazardous Waste Facility Permit (No. NM4890139088-TSDF) of the Waste Isolation Pilot Plant that was transmitted to the New Mexico Environment Department (NMED) on July 2, 2004. The enclosed comments are being submitted by the U.S. Department of Energy and Washington TRU Solutions, LLC pursuant to 20.4.1.900 New Mexico Administrative Code (NMAC) (incorporating 40 CFR §§ 270.41 and 42).

The enclosed document addresses comments raised by the NMED and stakeholders that were made known to the Permittees during the public comment period for this PMR. The proposed modification to the WIPP's Hazardous Waste Facility Permit is complete, fulfills the RCRA regulatory requirements for a Class 2 permit modification, and will protect human health and the environment.

Please contact us if you have any questions regarding the enclosed comments.

Sincerely,

R. Paul Detwiler, Acting Manager
U.S. Department of Energy

Steve Warren, General Manager
Washington TRU Solutions, LLC

Enclosure



Mr. Steve Zappe

-2-

September 7, 2004

cc: w/enclosure

J. Bearzi, NMED

J. Kieling, NMED

C. Noble, NMED

T. Hughes, NMED

Permittees' Comments:

Class 2 Permit Modification Request

Procedure for Consideration of Tank Waste

**Waste Isolation Pilot Plant
Carlsbad, New Mexico**

WIPP HWFP No. NM4890139088-TSDF

Submitted to NMED on July 2, 2004

September 7, 2004

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**Permittees' Comments:
Class 2 Permit Modification Request
Procedure for Consideration of Tank Waste**

1.0 Introduction

On July 2, 2004, the U.S. Department of Energy (DOE) and Washington TRU Solutions, LLC (WTS), referred to herein as the Permittees, submitted to the New Mexico Environment Department (NMED) a Class 2 Permit Modification Request (PMR) entitled "Procedure for Consideration of Tank Waste."

A 60-day public comment period on the PMR opened on July 7, 2004. The Permittees held public information meetings on the PMR in Carlsbad, New Mexico, on August 10, 2004, and in Santa Fe, New Mexico on August 12, 2004, pursuant to 20.4.1.900 New Mexico Administrative Code (NMAC) (incorporating 40 CFR § 270.42(b)(4)). Representatives of the NMED were in attendance at the public meetings held in Santa Fe.

This document presents the comments of the Permittees on the July 2, 2004, Class 2 PMR. These comments address comments, questions, and concerns raised by NMED and stakeholders that the Permittees learned of before and during the comment period.

2.0 Background

On November 26, 2003, the NMED issued a public notice and fact sheet stating its intent to approve an agency-initiated modification (also referred to as "NMED's permit modification") to the WIPP's hazardous waste facility permit (HWFP) that would limit waste eligible for disposal at WIPP to an inventory developed in 1995.¹

On January 30, 2004, the Permittees filed comments on NMED's permit modification. At the request of the Permittees, NMED scheduled a public hearing on its modification. The Permittees' comments pointed out that there were many wastes not identified in the 1995 inventory that had already been approved, received and disposed of at WIPP. The NMED's permit modification would have barred certain wastes from the ongoing cleanup of the DOE's Rocky Flats Environmental Technology Site (RFETS). As of June 2004, approximately 24% of RFETS TRU and TRU mixed waste had not yet been shipped to WIPP, some of which is not identified in the 1995 inventory.

On June 2, 2004, NMED and the Permittees filed a Joint Motion with the Hearing Officer requesting that the public hearing on NMED's permit modification be held in abeyance to allow the Permittees time to submit, and the NMED time to consider, a PMR which would supplant NMED's proposed permit modification. On June 3, 2004, the Hearing Officer issued an Order granting the Joint Motion, and on July 2, 2004, the Permittees submitted a Class 2 PMR. These Permittees' comments respond to the questions, concerns, and issues raised by stakeholders and NMED.

¹ Fact Sheet, Notice of Intent to Approve An Agency-Initiated Modification to the Hazardous Waste Facility Permit for the Waste Isolation Pilot Plant, Carlsbad, New Mexico, EPA I.D. No. NM4890139088, New Mexico Environment Department, November 26, 2003.

The Permittees' PMR proposes that the following language be included in the HWFP:

TRU mixed wastes from tanks that has ever been managed as high-level waste is not acceptable at WIPP unless specifically approved through a subsequent Class 3 permit modification. (Class 2 Permit Modification Request, Procedure for Consideration of Tank Waste, July 2, 2004).

The proposed PMR prohibits the disposal of TRU mixed waste from tanks that has ever been managed as "high-level waste" (HLW) unless such waste is approved for disposal by NMED. The proposed PMR also establishes the Class 3 PMR process as the procedure by which NMED and the public would consider for disposal at WIPP TRU mixed waste from tanks that has ever been managed as HLW.

3.0 Response to Comments

Before the Permittees' PMR was submitted on July 2, 2004, and during the 60-day public comment period that began on July 7, 2004, stakeholders and NMED raised several issues and made recommendations regarding the Permittees' PMR. This section responds to those issues and recommendations.

COMMENT 1:

It [the Permittees' PMR] does not specifically eliminate all of the 100 million gallons of liquid waste and sludge stored in 239 tanks at Hanford, Washington, the Savannah River Site (SRS) in South Carolina, and the Idaho National Engineering and Environmental Laboratory (INEEL), or the sludges from high-level waste and spent fuel storage at those sites. (Action Alert - No High-Level Waste at WIPP, Southwest Research and Information Center and collaborating organizations, August 2004).

NMED must not approve the DOE's incomplete permit modification request related to tank waste, which is inadequate to protect public health and safety. The DOE request does not specifically eliminate all of the 100 million gallons of liquid waste and sludge stored in 239 tanks at Hanford, Washington, the Savannah River Site (SRS) in South Carolina, and the Idaho National Engineering and Environmental Laboratory (INEEL), or the sludges from high-level waste and spent fuel storage at those sites. (Comment form letter, Nuclear Watch New Mexico, August 2004, <http://www.nukewatch.org/emailhlw/index.html>).

PERMITTEES' RESPONSE TO COMMENT 1:

These similar comments relate to waste at specific generator sites that the Commentators state the PMR "does not specifically eliminate." The purpose of the PMR is not to identify specific tanks or waste streams that are subject to the proposed procedural requirement. Instead, the purpose of the PMR is to establish a procedure whereby TRU mixed waste from tanks that has ever been managed as high-level waste may be considered for disposal at WIPP. The PMR accomplishes this purpose by (1) prohibiting TRU mixed waste which has ever been managed

as HLW from disposal at WIPP under the present provisions of the WIPP HWFP and (2) providing that TRU mixed waste which has ever been managed as HLW can only be disposed of at WIPP in the future if a Class 3 permit modification, which specifically authorizes the disposal of such waste, is requested and approved by NMED.

The PMR proposes to add an additional item to the list of prohibited wastes in Module II.C.3. If any of the waste discussed in these comments falls within the category of TRU mixed waste from tanks that has ever been managed as HLW, it would now be specifically excluded from disposal at WIPP unless NMED approved a Class 3 PMR proposed by the Permittees. The waste will be subject to applicable permit conditions, including the specific prohibitions identified in Module II.C.3.

Generator sites would be required to comply with this prohibition when they assemble their waste characterization information. If waste at a generator site is identified as TRU mixed waste from tanks that has ever been managed as HLW, the Permittees would be required to obtain a Class 3 permit modification from NMED before the waste can be accepted for disposal at WIPP. The Class 3 permit modification request required by the proposed procedure would be subject to the regulatory and administrative requirements applicable to Class 3 modifications, including public comment and a potential hearing.

The proposed procedure would apply to TRU mixed waste from tanks that has ever been managed as HLW. The PMR does not change the prohibition on the disposal of HLW and spent nuclear fuel at WIPP found in the Land Withdrawal Act (LWA).² Nor does it change the definition of HLW found in the Nuclear Waste Policy Act, which was incorporated in the LWA. Instead, it expands that prohibition to any waste from tanks that has ever been managed as HLW even if it is in fact TRU mixed waste.

The stakeholders have not raised any specific concerns supporting their general claim that the Permittees PMR "is inadequate to protect public health and safety." The proposed PMR, which establishes a procedure by which TRU mixed waste from tanks that has ever been managed as HLW may be considered for disposal at WIPP, does not change any of the operations at the WIPP facility. Nor does it authorize the disposal of additional waste at the facility. In fact, the proposed PMR identifies a category of TRU mixed waste that will not be accepted without approval by NMED of a Class 3 permit modification. NMED and stakeholders will have an opportunity to examine the human health and safety aspects associated with WIPP disposal of TRU mixed waste from tanks that has ever been managed as HLW through the Class 3 permit modification process described in Section 2 above.

The stakeholders have not identified specific deficiencies in the PMR indicating that it is incomplete. It is the Permittees' position that the July 2, 2004 Class 2 PMR, along with the recommended changes in Section 4 below, satisfy the regulatory requirements for a complete Class 2 permit modification request. The PMR describes the exact change to be made to the permit conditions and supporting documents referenced by the permit, as required by 20.4.1.900 NMAC (incorporating 40 CFR § 270.42(b)(1)(i)). The PMR includes detailed redline/strikeout revisions to the text of the WIPP HWFP showing the exact changes proposed.

² Pub. L. No. 102-579, 106 Stat. 4777 (1992) and Pub. L. No. 104-102, 110 Stat. 2851-2854 (1996), Section 12.

The Permittees' PMR explains why the modification is needed, as required by 20.4.1.900 NMAC (incorporating 40 CFR § 270.42(b)(1)(iii)). The PMR, as explained in Section 2.2 above, is needed because of the NMED Hearing Officer's Order of June 3, 2004.

The PMR provides the applicable information specified by 40 CFR §§ 270.13 through 270.21, 270.62 and 270.63, as required by 20.4.1.900 NMAC (incorporating 40 CFR § 270.42 (b)(1)(iv)). The PMR includes a regulatory crosswalk describing those portions of the WIPP HWFP that would be altered by the PMR, and the associated regulatory citations. Required information is included in Attachment A to the PMR. The PMR, along with these Comments, satisfies the regulatory requirements for a Class 2 PMR.

It is the Permittees' position that the PMR is adequate because it meets all applicable regulatory requirements, as described in the PMR, and it is compliant with the NMED Hearing Officer's Order of June 3, 2004.

COMMENT 2:

It appears to me that the permittees may be trying to exclude from the PMR some high-level waste sludges and spent nuclear fuel sludges that are included in the agency-initiated modification. Recommendation: The permittees should address that issue, specifically including the Hanford K-Basin sludges. If there are other sludges not included in the TWBIR [WIPP Transuranic Baseline Inventory Report, Revision 2, 1995] that the permittees believe are not included in the PMR, they should identify them, and explain why such sludges are not being included in the PMR. (E-mail from Don Hancock of Southwest Research and Information Center to Loraine Hollingsworth, et al., Re: WIPP Permittees' Class 2 PMR draft, June 25, 2004)

PERMITTEES' RESPONSE TO COMMENT 2:

See Response to Comment 1, above.

As already stated, the purpose of the PMR is not to identify specific wastes or waste streams that may or may not be accepted for disposal at WIPP. The PMR does not change the existing prohibition on HLW and spent nuclear fuel found in the WIPP LWA. The PMR only addresses TRU mixed waste from tanks that has ever been managed as HLW. Whether a particular waste or waste stream was identified in the TWBIR is not relevant for the purposes of the PMR.³ The proposed procedure and addition to the list of prohibited items does not depend on whether a particular waste was identified in the TWBIR.

No decision has been made whether the K-Basin sludges would be disposed of at WIPP. The sludges will not be classified and characterized until they are removed from the basins. After the sludges are removed, they will be subject to the relevant HWFP requirements and will not be eligible for disposal at WIPP unless all permit conditions are met.

³ See Section 2 above. The TWBIR is the inventory developed in 1995 that was referenced in the agency-initiated modification.

COMMENT 3:

Others have pointed out that certain waste categories would not be barred by this modification, such as sludges in spent fuel basins. It should be made clear that in ruling on this modification, NMED is making no determination that any such categories of wastes are authorized. (E-mail from Lindsay Lovejoy to Lorraine Hollingsworth, et al., Re: WIPP Permittees' Class 2 PMR draft, June 25, 2004).

PERMITTEES' RESPONSE TO COMMENT 3:

See responses to Comments 1 and 2, above.

The purpose of the PMR is not to identify specific tanks or waste streams that are subject to the proposed procedural requirement. Approval of the PMR by NMED would not constitute a determination that any particular category of waste is authorized for disposal at WIPP. If approved by NMED, the PMR will add an additional item to the list of prohibited items in Module II.C.3., and establish a procedure requiring that a Class 3 permit modification be submitted to and approved by NMED before TRU mixed waste from tanks that has ever been managed as HLW is allowed to be disposed of at WIPP.

The Permittees' PMR would not change or otherwise diminish the WIPP Land Withdrawal Act statutory prohibition on the use of WIPP for disposal of spent nuclear fuel.

COMMENT 4:

Don Hancock of Southwest Research and Information Center requested information concerning specific tanks at DOE's Hanford facility that were associated with four waste streams identified in the WIPP's recent Compliance Recertification Application to the U.S. Environmental Protection Agency (EPA):

At last night's public meeting on the EPA recertification, in response to a question, it was stated that the Recertification Application does not identify the specific tanks from which the four waste streams (RP-W013, RP-W016, RP-W754, RP-W755) included in Annex J come from. (Letter from Don Hancock of Southwest Research and Information Center to Paul Detwiler of DOE, July 28, 2004).

The Permittees answered these stakeholder's questions:

I read your...letter...of July 28, 2004 requesting the specific tanks that made up the four waste streams identified in the CRA as tank waste. They are: • RP-W013 contains SY-102 (RH) tank waste • RP-W016 contains AW-103 and AW-105 (RH) tank waste • RP-W754 contains B-201 through B-204 and T-201 through T-204 (CH) tank waste -RP-W755 contains the T-111 (CH) tank waste. (E-mail from Roger Nelson of DOE to Don Hancock of Southwestern Research and Information Center, July 28, 2004, 9:42 AM, Re: Hanford tanks combined into four RP Waste Streams for purpose of CRA).

The Permittees also provided follow-up information requested by Mr. Hancock:

During John Kristofzski's presentation at the March 16 workshop, he explained that more than just the 12 tanks that were included in the four waste streams in the CRA were being investigated by CHM2Hill as possibly not qualifying as HLW (i.e., sufficient documentation to show that the wastes in these other tanks were not a result of reprocessing) and might be proposed as TRU waste in the future. These additional possibilities included the two tanks (T-104 and T-110) that you reference in your reply below. As I recall, there were a total of 20 tanks under consideration (12 already in the CRA and 8 additional being investigated). (E-mail reply from Roger Nelson of DOE to Don Hancock of Southwester Research and Information Center, July 28, 2004, 11:24 AM, Re: Hanford tanks combined into four RP Waste Streams for purpose of CRA).

PERMITTEES' RESPONSE TO COMMENT 4:

Although the Permittees provided information to answer Mr. Hancock's question regarding Hanford tank waste, the Permittees contend that such information should not have a bearing on NMED's consideration of the Permittees' Class 2 PMR, Procedure for Consideration of Tank Waste. The purpose of the PMR is not to identify specific waste or waste streams that might be considered for disposal at WIPP. The information requested by the stakeholder would be relevant in a subsequent Class 3 PMR that the Permittees might submit seeking approval for specific TRU mixed waste from these tanks. A Class 3 PMR submitted pursuant to the proposed procedure would have to contain all information required by NMAC 20.4.1.900 (incorporating 40 CFR § 270.42(c)(i) - (iv)), which establishes the criteria for a complete Class 3 permit modification. Such information would include, among other things, specific information on the waste, a description of the origin of the waste (e.g., the tanks it would come from and the processes that generated it), and a compatibility evaluation. Any such PMR would be considered by NMED in accordance with the requirements for permit modifications at NMAC 20.4.1.900 and the permit procedures at NMAC 20.1.4. The Class 3 PMRs would also provide for public participation pursuant to 20.4.1.900 NMAC (incorporating 40 CFR § 270.42(c)).

COMMENT 5:

During the public information meetings on Permittees' PMR held in Santa Fe, New Mexico on August 12, 2004, NMED suggested that the title of one column in Table II.C.3.i be changed from "Date Class 3 Permit Modification Request Submitted" to "Date Class 3 Permit Modification Approved".

PERMITTEES' RESPONSE TO COMMENT 5:

The Permittees agree, and, as shown in Section 4 below, propose to change the permit text accordingly.

COMMENT 6:

NMED also stated at the public information meetings that the term "Description of Wastes" as a column title in Table II.C.3.i is vague. NMED requested clarification as to the type of information that would be included in this column of the table and asked for an example.

PERMITTEES' RESPONSE TO COMMENT 6:

Any future Class 3 PMR that the Permittees might submit seeking NMED approval of TRU mixed waste from tanks formerly managed as HLW would provide whatever information on the waste that NMED believed is necessary for it to consider its disposal at WIPP, including a description of the origin of the waste (e.g., the tanks it would come from and the processes that generated it), and a compatibility evaluation, as well as any other information for Class 3 PMRs required by 20.4.1.900 NMED (incorporating 40 CFR § 270.42(c)). Following approval of a Class 3 PMR, a general description of the TRU waste approved for disposal would be inserted in Table II.C.3.i. The following is an example of the type of description that might be included in Table II.C.3.i:

This waste is a homogeneous solid that was produced by process X [where X presents the process or processes that produced the waste] and is currently stored in Y at DOE generator site Z [where Y represents the specific HLW tank(s) associated with the waste, and Z represents the DOE generator site]

The intent of such an entry into Table II.C.3.i is to link NMED's approval to a specific Class 3 PMR that might be submitted and its associated administrative record. Any such Class 3 PMR and administrative record would include whatever information on the waste that NMED believed is necessary for approval of the disposal of TRU mixed waste from tanks that had ever been managed as HLW.

COMMENT 7:

NMED also stated at the public information meetings that use of the word "subsequent" to modify the term "Class 3 permit modification" in proposed Section II.C.3.i and proposed line 12a of Table B6-1 is not necessary and could be removed without changing the meaning of the permit conditions.

PERMITTEES' RESPONSE TO COMMENT 7:

The Permittees agree, and as described in Section 4 below, propose to eliminate the word "subsequent."

COMMENT 8:

I note the permittees' rationale for submitting the PMR as a class 2 modification. However, the PMR also could be submitted as a class 3 modification.

Recommendation: The permittees should discuss the provisions of 40 CFR 270.42(d) and why they are not submitting the PMR as a class 3 request. (E-

mail from Don Hancock of Southwest Research and Information Center to Loraine Hollingsworth, et al., Re: WIPP Permittees' Class 2 PMR draft, June 25, 2004).

PERMITTEES' RESPONSE TO COMMENT 8:

The regulation cited in the comment states:

Other Modifications. (1) In the case of modifications not explicitly listed in appendix I of this section, the permittee may submit a Class 3 modification request to the Agency, or he or she may request a determination by the Director that the modification should be reviewed and approved as a Class 1 or Class 2 modification. (40 CFR § 270.42(d)(1)).

The Permittees did not submit the PMR to NMED for determination of class because the changes the Permittees are seeking are explicitly listed in Item B.1.d of Appendix I to 40 CFR § 270.42(d)(1) as a Class 2 modification. Item B.1.d covers "other changes" to the portion of the permit known as the Waste Analysis Plan. The Permittees' PMR establishes a procedure and a prohibition in the General Facility Conditions and the Waste Analysis Plan. The proposed PMR does not change any of the operations at the WIPP facility. Nor does it authorize the disposal of additional waste at the facility.

4.0 Proposed Revisions to Permit Text

Based on the foregoing, the Permittees propose the following revisions to the permit text originally proposed in Permittee's July 2, 2004 PMR, Procedure for Consideration of Tank Waste.

4.1 Column Title in Table II.C.3.i

As described in Section 3 above, the Permittees' propose as the title of the first column of Table II.C.3.i the following:

"Date Class 3 Permit Modification Request Approved"

4.2 Elimination of the Word "Subsequent"

As described in Section 3 above, the Permittees' propose to eliminate the word "subsequent" from the following paragraphs:

General Facility Condition II.C.3.i

"Tank Waste - TRU mixed wastes from tanks that has ever been managed as high-level waste is not acceptable at WIPP unless specifically approved through a Class 3 permit modification. Such wastes are listed in Table II.C.3.i below."

Waste Analysis Plan, Section B-1c of HWFP Attachment B

"• waste from tanks that has ever been managed as high-level waste unless specifically approved through a Class 3 permit modification"

As shown in Section 4.3 below, the Permittees also propose to eliminate the word "subsequent" from proposed language for the HWFP Attachment B6 Checklist.

4.3 Typographical Corrections (HWFP Cover page and Table II.C.3.i reference in HWFP Attachment B6 checklist)

After submission of the Permittees' PMR on July 2, 2004, two typographical errors were identified. The cover page of the Permittees' PMR contained a typographical error in the Permit Number, which should be as follows:

- WIPP HWFP No. NM4890139088-TSDF.

Also, the reference to Table II.C.3.i in the HWFP Attachment B6 checklist should state as follows:

"• TRU mixed waste from tanks that has ever been managed as high-level waste and that has not been approved through a Class 3 permit modification and listed in Table II.C.3.i of Module II"

5.0 Conclusion

The Permittees' Comments respond to issues raised by stakeholders and NMED prior to and during the public comment period for the Permittees' PMR.

The Permittees' PMR requires the use of the Class 3 modification process as the procedure whereby proposals for WIPP disposal of TRU mixed wastes from tanks that has ever been managed as HLW would be considered by NMED and the public. The PMR adds an additional prohibited item to Module II.C.3. If a waste or waste stream is identified as waste from tanks that has ever been managed as HLW, it would have to be approved for disposal through a Class 3 PMR. The PMR does not address specific waste or waste streams, nor does it change the existing prohibition on the disposal of HLW or spent nuclear fuel at WIPP.

The Permittees' proposed PMR will protect human health and the environment, and the PMR is complete. The Permittees request that NMED approve the Permittees' Class 2 PMR, Procedure for Consideration of Tank Waste, with the changes outlined in Section 4 above.